

Period One – Project Plan

Goals and Tasks for Botball 2019

<i>Game Goals and Tasks</i>		<i>Deadlines</i>
1.	Review the game rules and documents	03/12/2019
	a. Have the game board set up to visualize the course and terrain the bot will need to traverse.	03/12/2019
	b. Allow students access to the Botball website with all the documents to be reviewed at any time.	03/12/2019
2.	Brainstorm Strategies	03/12/2019
	a. Have an in-class discussion on the most efficient ways to score the most points and the rules to be followed.	03/12/2019
	b. Put in charge one or two people to be in charge of each bot to oversee the bot's strategy and progress	03/12/2019
3.	Decide the different teams and split up responsibilities	03/12/2019
	a. Determine who will be in charge of mechanical building	03/12/2019
	b. Determine who will be in charge of programming	03/12/2019

<i>Robot Building Goals and Tasks.</i>		<i>Deadlines</i>
1.	Prototype the Create and LEGO Robots	03/14/2019
	a. Discuss how the robot will complete each task	03/14/2019
	b. Decide the best course of action	03/14/2019
2.	Build the Robot	03/15/2019
	a. Gather all necessary materials	03/15/2019
	b. Begin building	03/15/2019
3.	Complete Construction	03/22/2019
	a. Finish building the base	03/22/2019
	b. Finish building the moving parts on top	03/22/2019

<i>Programming Goals and Tasks</i>		<i>Deadlines</i>
1.	Test Servos and sensors	03/27/2019
	a. Find black line sensors to find on/off line values	03/27/2019
	b. Find servos start and end locations	03/27/2019
	c. Find distance sensors values for distance from intended object	03/27/2019
2.	Complete Program for LEGO Robot	04/17/2019
	a. Write pseudocode for what the robot will need to do to complete each task	04/03/2019
	b. Code basic functions like forward/ reverse motion and turns	04/03/2019
	c. Code and test line follow function	04/10/2019

	d. Code the necessary grabbing and/or lifting with servos	04/10/2019
3. Test code		04/17/2019
	a. Run the code on the game board to see what requires altering	04/17/2019
	b. Change the code as needed till the intended goal is met	4/17/2019

Documentation Goals and Tasks		Deadlines
1. First Period Documentation Complete		03/20/2019
	a. Discuss a plan that would allow the best time management to complete the bots in time for the competition	03/14/2019
	b. Talk to peers about their intended process and any foreseen complications	03/14/2019
2. Second Period Documentation Complete		04/17/2019
	a. Compile necessary data and code from each group	04/12/2019
	b. Document and Photograph the robots and their mechanical design	04/12/2019
	c. Create GitHub account to upload code	04/12/2019
	d. Upload video of testing robots to YouTube	04/12/2019
3. Third Period Documentation Complete		05/08/2019
	a. Have each member of the class take the survey	05/03/2019
	b. Ask each group to document what they initially intended on doing and why/ how they changed their plans	05/03/2019

Schedule Conflicts		Deadlines
1. Easter Break		04/30/2019
2. No classes Monday due to Christian Service		Every Monday through tournament period
3. AP Exams		05/10/2019

Team Organization

Schedule of Meeting Times:

Class Workshop – March 9th and 10th

Tournament – May 11th

Each meeting will be 45 – 50 minutes long with extra time during lunch and free periods

Schedule for March – 12th, 14th, 15th, 19th, 21st, 22nd, 26th, 27th, 29th

Schedule for April – 2nd, 3rd, 5th, 10th, 12th, 17th,

Schedule for May – 2nd, 3rd, 8th, 9th,

Division of Labor:

Adult Team Leader: Michael Chiafulio

Robot Building Team for LEGO Robot 1: Robert Buckley, George Gregorczyk

Robot Building Team for LEGO Robot 2: Joe Macchiarola, Rocco Dioguardi

Programmers for LEGO Robot 1: Patrick Scariano

Programmers for LEGO Robot 2: Patrick Nilan

Documentation Team: Shi Yuan Ge and Joseph Medina

Conflict Resolution:

The team has agreed that if disagreements occur we will handle them in the following way:

1. Team members meet to discuss any disagreements and how they can come to an agreement
2. Each member will present their opinion and the group will decide which is the best for the team
3. If the group cannot come to a consensus they will turn to Mr. Chiafulio for the final decision on how to progress.